



Western prairie fringed orchid

NOCTURNAL RENDEZVOUS

Beautiful by day and more odoriferous at night, it's under the cover of darkness the western prairie fringed orchid amplifies its fragrance to tempt its only pollinator.

Because its nectar spur is longer than any other North American orchid, scientists tell us, pollination duties fall to the long-tongued hawkmoth.

With tongue extended into the orchid's spur, pollen is brushed onto the hovering moth's suitably-spaced eyes, and then transferred to neighboring plants as it makes its rounds. If it weren't for this nocturnal encounter between moth and orchid, the latter would go unfertilized and produce no seeds.

While the western prairie fringed orchid isn't among the species of conservation priority featured this month in *North Dakota OUTDOORS* – no plants are – it is a species of concern, nonetheless. Listed in 1989 as threatened in North Dakota under the federal Endangered Species Act, the fringed orchid has experienced at least a 60 percent decline from historic times.

Significant in its near disappearance from North Dakota – and extirpation from South Dakota – is the conversion of native tallgrass prairie to cropland. It's said that only 1-2 percent of the state's native tallgrass habitat remains today, and much of what's left is found in the southeast on the Sheyenne National Grasslands where the fringed orchid blooms.

North Dakota is home to one of the last orchid strongholds in North America, but even today's population – maybe 12,800 plants when conditions are optimal – pales in how things use to be.

"What's surprising is that fringed orchid has been able to survive at all, given the conversion of the native prairie," said Karen Kreil, wildlife biologist for the U.S. Fish and Wildlife Service, Bismarck. "It's an amazing thing."

The fringed orchid is distinguished by large, white flowers that come from a single stem. Up to 20 flowers – fringed on the margins, giving it a feathery appearance – may occur on a single plant that grows up to 3 feet high. Flowers emerge sometime from mid-June to late July. The plant's floral display typically lasts about 21 days, while individual flowers last about 10 days.

If environmental conditions are such, this feathery perennial can live for several years. The cycle continues in early fall when the orchid's seeds are carried and spread by the wind. The trick, of course, is catching the right breeze that will plant them in what little remains of North Dakota's native tallgrass habitat.

RON WILSON is editor of *North Dakota OUTDOORS*.